

METHODS AND APPARATUS FOR FACILITATING CONCURRENT PUSH-TO-TALK OVER CELLULAR (POC) GROUP COMMUNICATION SESSIONS

ABSTRACT

5       Methods and apparatus for facilitating concurrent Push-to-talk over Cellular (PoC) group communication sessions for a mobile station (102) are disclosed. A first PoC communication session (550) for a first user group (504) is maintained while a second PoC communication session (552) for a second user group (506) is concurrently maintained, where the second user group (506) has at least one common  
10 member (516) with the first user group (504). The second user group (506) may have at least one member (518, 520) which is not included in the first user group (504). Through a user interface, a PoC user may select between the first and the second user groups (504 and 506) for communication or combine the communications. In an alternative embodiment, all of the members (518, 520, 522) of a second user group  
15 (604) may be included in a first user group (602). In a specific approach, encrypted data packets of a PoC communication sub-session are communicated during a PoC communication session. If a key for the encrypted data packets is known for the mobile station (102), the encrypted data packets are decrypted to facilitate the PoC communication sub-session involving the mobile station (102); otherwise the  
20 encrypted data packets are discarded.